

TSTTQ-B

TEST SET, TELECOMMUNICATIONS

1. GENERAL. This procurement requires a wideband telecommunications test set capable of performing measurements on voice, program, and data circuits.

2. CLASSIFICATION. Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications. The convertible/rackmountable requirement is invoked.

3. OPERATIONAL REQUIREMENTS. The equipment shall measure noise, noise-with-tone, noise-to-ground (from 50 to 110 dBm), signal-to-noise ratio, impulse noise, envelope delay distortion, return loss, phase/amplitude jitter, intermodulation distortion and P/AR. C-message, program, 3 kHz, and 15 kHz flat frequency weighting shall be provided for noise measurements. The equipment shall measure received tone level and frequency while simultaneously transmitting a tone level. The equipment shall perform all measurements within the minimum specifications identified in ANSI/IEEE Standard 743-1984 with the exception of the Test Equipment Characteristics and Environment requirements which shall be governed by MIL-T-28800. Additional requirements are invoked below.

3.1 Frequency range. 50 Hz to 110 kHz.

3.2 Impedances. 135, 600, and 900 ohms.

3.2.1 Connections. Audio jack input and output connectors and dial terminals for connecting a lineman's handset.

3.3 Display. Readouts for input and output frequencies and levels shall be provided. Measurement results shall be provided in both graphic and tabular formats.

3.4 Monitor. A built-in speaker with volume control shall be provided to vary speaker output level of received or transmitted signals.

3.5 Memory. The equipment shall be capable of storing the results of up to 3 test sessions for subsequent recall and evaluation.

3.6 Printer interface. The equipment shall be supplied with a digital printer interface for hardcopy output of test results. Printing of data shall be accomplished by direct connection to a printer without need for a separate controller.

3.7 Rackmounting. The equipment shall be contained in a Style E enclosure for portability and shall be provided with a conversion kit which will allow rackmounting in accordance with the convertible /rackmountable requirements of MIL-T-28800.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 nominal and dc internal power source requirements are invoked as detailed below.

4.1.2 Nominal power source. Maximum power consumption: 75W.

4.1.3 DC internal power source. Internal batteries and charger are required. Minimum operating time shall be 3 hours following a maximum recharge time of 14 hours.

4.2 Weight. 6.8 kg (15 lb) maximum.

4.3 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. Requests for approving the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.